CLAIMS

(1) A computer system for performing grid computing with a plurality of computers connected through a network, the computer system comprising:

a center server for requesting the computers on the network to execute a job; and

a process server for executing a job in response to a request from the center server;

wherein the center server comprises:

a scheduler section which assigns a job to be executed to the process server and issues a job execution request; and

an agent section which manages information about the process server, receives the request issued by the scheduler section, and sends the request to the process server to which the requested job has been assigned, depending on the status of the process server.

(2) The computer system according to claim 1, wherein the agent section is provided for each of a plurality of process servers.

(3) The computer system according to claim 2, wherein the agent section obtains information about the capacity and operating status of the process server corresponding to the agent section from the process server and manages the information, and the scheduler section assigns the job to the process server on the basis of the information managed by the agent section.

(4) The computer system according to claim 1, wherein the agent sections send the request received from the scheduler section to at least some of the process servers in response to polling accesses from the process servers, and the agent sections send the request received from the scheduler section to at least some of the other process servers at timing managed by the agent sections.

(5) The computer system according to claim 1, wherein at least some of the process servers are connected to the center server through

a firewall; and

the agent sections send the request received from the scheduler section to the process servers connected through the fire wall in response to polling accesses from the process servers.

(6) A server for scheduling jobs and requesting execution of the jobs in a grid computing system, the server comprising:

a scheduler section which assigns a job to be executed to a computer constituting the system and requests the computer to execute the job; and

an agent section which manages information about the computer, receives the request for execution of the job by the scheduler section on behalf of the computer to which the job has been assigned, and provides a request for execution of the job to the computer, depending on the status of the computer.

(7) The server according to claim 6, wherein the agent section is provided for each of computers constituting the system and makes a request for execution of the job by using an individual communication scheme established between the agent section and a corresponding computer.

(8) The server according to claim 7, wherein at least some of the agent sections provide a request for execution of the job to the computers constituting the system in response to polling accesses from the computers, and at least some of the other agent sections provide a request for execution of the job to the computers at timing managed by the agent sections.

(9) A server for scheduling jobs and requesting execution of the jobs in a grid computing system, the server comprising:

an agent section which manages information about the capacity and operating status of a computer constituting the system, relays communication with the computer, and performs transmission and reception according to the operating status of the computer; and

a scheduler section which assigns, on the basis of the information

managed by the agent section, a job to be executed by the computer, and requests the computer to which the job has been assigned to execute the job through the agent section.

(10) The server according to claim 9, wherein the agent section is provided for each of computers constituting the system, and the scheduler section requests execution of a job through an agent section corresponding to a computer to which the job has been assigned.

(11) The server according to claim 9, wherein the scheduler section assigns the job on the basis of information about the capacity of the computer stored in the agent section and makes a request for execution of the job regardless of the operating status of the computer to which the job has been assigned, and the agent section sends a request for execution of a job issued by the scheduler section to at least some of the computers in response to polling accesses from the computers, and sends a request for execution of a job issued by the scheduler section to at least some of the other computers at timing managed by the agent section.

(12) A job execution control method using a computer to schedule jobs and request execution of the jobs in a grid computing system, comprising the steps of:

the computer assigning a job on the basis of the capacity of a process server constituting the system, stored in a storage, and executing a job, regardless of the operating status of the process server;

the computer issuing a job execution request to the process server to which the job has been assigned; and

the computer holding temporarily the issued job execution request and sending the job execution request to the process server to which the job has been assigned, depending on the operating status of the process server.

(13) A program for causing a computer to implement the functions of:

storing in recording means and managing information about a process server which constitutes a grid computing system and executes a job;

assigning a job to be executed to the process server on the basis of information about the process server and issuing a job execution request; and

receiving the issued request and sending the request to the process server to which the requested job has been assigned, depending on the operating status of the process server.

(14) The program according to claim 13, wherein the function of issuing a job execution request causes the computer to assign the job regardless of the operating status of the process server.

(15) The program according to claim 13, wherein the function of sending the request to the process server causes the computer to send the request to at least some of process servers in response to polling accesses from the process servers, and send the request to at least some of the other process servers at timing managed by the computer.

(16) The program according to claim 13, wherein the function of sending the request to the process server causes the computer to send the request received from a scheduler section to the process server connected to the computer through a firewall in response to a polling access from the process server.